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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,695	07/02/2003	Anand Venkatanarayan	P16177	4388
46915 7590 07/25/2007 KONRAD RAYNES & VICTOR, LLP. ATTN: INT77 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER TANG, KAREN C	
			ART UNIT 2151	PAPER NUMBER
			MAIL DATE 07/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/612,695	Applicant(s) VENKATANARAYAN ET AL.	
	Examiner Karen C. Tang	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/26/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/27/07</u> | 6) <input type="checkbox"/> Other: _____ |

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- This action is responsive to the amendment and remarks file on 6/26/07.
- Claims 1-23, and 25-33 are presented for further examination.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-23, and 25-33 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-23, and 25-33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 9-25, 29-33 of copending Application No. 10/637,305. Although the conflicting claims are not identical, they are not patentably distinct from each other because.

Claim(s) 1-5, 9-15, 19-25, and 29-33 of Patent/Application # 10/637305 contain(s) every element of claim (s) 1-33 of the instant application and thus anticipated the claim(s) of the instant

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application. Claim(s) 1-23, and 25-33 of the instant application therefore is/are not patently distinct from the co-pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23, and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vepa et al hereinafter Vepa (US 6,490,632) in view of Bain et al hereinafter Bain (US 2004/0205250).

1. Referring to Claims 1, 8, 11, 14, 20, 25, and 31, Vepa disclosed a method for processing a packet to transmit on a network in a host system including a plurality of network adaptors, comprising: receiving at a first network adaptor a packet (refer to Col 6, Lines 23-24); performing, within the first network adaptor, load balancing operations to select one network adaptor to transmit the received packet (the server 190 and the interface cards are one entity, therefore, the first load balancing operation is operated within the first network adaptor, refer to Col 7, Lines 5-20, and Col 8, Lines 38-53); and if the determined network adaptor is a second network adaptor, then forwarding, with the first network adaptor, the received packet to the

second network adaptor (whichever the NIC being selected, the packet will be forward to the selected one, refer to Col 10, Lines 8-35).

Although Vepa disclosed the invention substantially as claimed, Vepa is silent regarding load balancing algorithm is being utilized and also utilized the load balancing algorithm to select which port to transmit the data to.

Bain, in an analogous art, discloses the load balancing algorithm is being utilized (in the computer system, each adaptor/server utilized the load-balancing algorithm to determine which adaptor/server has the least of work, and then sent out the package/data utilizing the load balancing algorithm again/a second load balancing algorithm, refer to 0035, 0038-0039) and also utilized the load balancing algorithm to select which port to transmit the data to (a load balancing algorithm and a complementary load-balancing algorithm is being used, refer to 0042-0045).

Hence, providing the functionalities as disclosed by Bain, would be desired for a user to ensure that requests from the client and corresponding responses from internal servers are processed by the same external network interface server.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Vepa by including the features disclosed by Bain.

2. Referring to Claims 2, 15 and 26, Vepa disclosed determining, with the first network adaptor, whether the first network adaptor is a primary network adaptor or a secondary network adaptor (the network adaptor that is functioning, is the primary adaptor, refer to Col 13, Lines 24-41); and transmitting, with the first network adaptor, the received packet over a network if the first network adaptor is the secondary network adaptor, wherein the first network adaptor

performs the load balancing operations if the first network adaptor is the primary network adaptor (a load balancing which determined the selected NIC, which is the primary adaptor, and the secondary adaptor is only a substitute and did not perform the load balancing in order to determined it, refer to Col 13, Lines 25-41).

Although Vepa disclosed the invention substantially as claimed, Vepa is silent regarding load balancing algorithm is being utilized and also utilized the load balancing algorithm to select which port to transmit the data to.

Bain, in an analogous art, discloses the load balancing algorithm is being utilized (in the computer system, each adaptor/server utilized the load-balancing algorithm to determine which adaptor/server has the least of work, and then sent out the package/data utilizing the load balancing algorithm again/a second load balancing algorithm, refer to 0035, 0038-0039) and also utilized the load balancing algorithm to select which port to transmit the data to (a load balancing algorithm and a complementary load-balancing algorithm is being used, refer to 0042-0045).

Hence, providing the functionalities as disclosed by Bain, would be desired for a user to ensure that requests from the client and corresponding responses from internal servers are processed by the same external network interface server.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Vepa by including the features disclosed by Bain.

3. Referring to Claims 3 and 27, Vepa disclosed wherein the load balancing operations are only performed in the primary network adaptor (a load balancing which determined the selected

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NIC, which is the primary adaptor, and the secondary adaptor is only a substitute and did not perform the load balancing in order to determined it, refer to Col 13, Lines 25-41.).

Although Vepa disclosed the invention substantially as claimed, Vepa is silent regarding load balancing algorithm is being utilized and also utilized the load balancing algorithm to select which port to transmit the data to.

Bain, in an analogous art, discloses the load balancing algorithm is being utilized (in the computer system, each adaptor/server utilized the load-balancing algorithm to determine which adaptor/server has the least of work, and then sent out the package/data utilizing the load balancing algorithm again/a second load balancing algorithm, refer to 0035, 0038-0039) and also utilized the load balancing algorithm to select which port to transmit the data to (a load balancing algorithm and a complementary load-balancing algorithm is being used, refer to 0042-0045).

Hence, providing the functionalities as disclosed by Bain, would be desired for a user to ensure that requests from the client and corresponding responses from internal servers are processed by the same external network interface server.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Vepa by including the features disclosed by Bain.

4. Referring to Claims 4, 16 and 28, Vepa disclosed wherein performing the load balancing operations comprises: determining one network adaptor as a function of a destination network address to which the received packet is to be transmitted over the network.

5. Referring to Claims 5 and 19, Vepa disclosed wherein the network address comprises one of an Internet Protocol address and Fibre Channel address (refer to Col 8, Lines 32).

6. Referring to Claims 6, 17 and 29, Vepa disclosed wherein determining one network adaptor as the function of the target network address comprises using a hash algorithm to select one network adaptor based on the target network address (refer to Col 6, Lines 10-30).

7. Referring to Claims 7, 18, and 30, Vepa disclosed wherein performing the load balancing operations comprises: determining one network adaptor based on a relative load of each of the network adaptors (refer to Col 10, Lines 30-40).

Although Vepa disclosed the invention substantially as claimed, Vepa is silent regarding load balancing algorithm is being utilized and also utilized the load balancing algorithm to select which port to transmit the data to.

Bain, in an analogous art, discloses the load balancing algorithm is being utilized (in the computer system, each adaptor/server utilized the load-balancing algorithm to determine which adaptor/server has the least of work, and then sent out the package/data utilizing the load balancing algorithm again/a second load balancing algorithm, refer to 0035, 0038-0039) and also utilized the load balancing algorithm to select which port to transmit the data to (a load balancing algorithm and a complementary load-balancing algorithm is being used, refer to 0042-0045).

Hence, providing the functionalities as disclosed by Bain, would be desired for a user to ensure that requests from the client and corresponding responses from internal servers are processed by the same external network interface server.

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Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Vepa by including the features disclosed by Bain.

8. Referring to Claims 9, 12, 21, and 32, wherein the device driver does not perform load balancing operations when selecting one of the plurality of network adaptors to receive the packet (refer to Col 7, Lines 50-60).

9. Referring to Claims 10, 13, 22, and 33, wherein the device driver further performs: detecting a failure of one network adaptor designated as the primary network adaptor; determining an available network adaptor to function as the primary network adaptor, wherein subsequently received packets are transmitted to the determined network adaptor; configuring a register within the determined network adaptor to cause the determined network adaptor to operate as the primary network adaptor and perform load balancing operations (refer to Col 13, Lines 25-41).

10. Referring to Claim 23, Vepa disclosed a storage comprises a magnetic storage media (refer to NIC is a network interface card which is a removable card that stores information which is inherent a magnetic storage media).

Conclusion

Examiner's Notes: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the

specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571)272-3440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KT

Valencia Martin-Wallace
SPE ART UNIT 2151